

## Physical Representation – Seamounts

### description

Seamounts are undersea peaks that rise abruptly from the bottom of the sea. Seamounts are often extinct volcanoes that provide a complex habitat, which sustains a multitude of marine organisms, including a large number of filter feeding organisms such as sponges and deep-sea corals, and diverse invertebrate populations that provide rich food sources for many species of fish living in the region.

Deep-sea crabs, sablefish and rockfishes are just a few of the species often associated with these topographically and ecologically unique ecosystems. Because seamounts are isolated in the ocean, sometimes far from one another, species living on seamounts are mostly endemic and face a higher risk of extinction owing to their restricted range. These hot spots for speciation offer an opportunity to study patterns in marine biodiversity.

Seamounts illustrated here represent the spatial distribution of this unique habitat according to best available data from Seamounts Online and the Baja California to the Bering Sea Project (B2B).

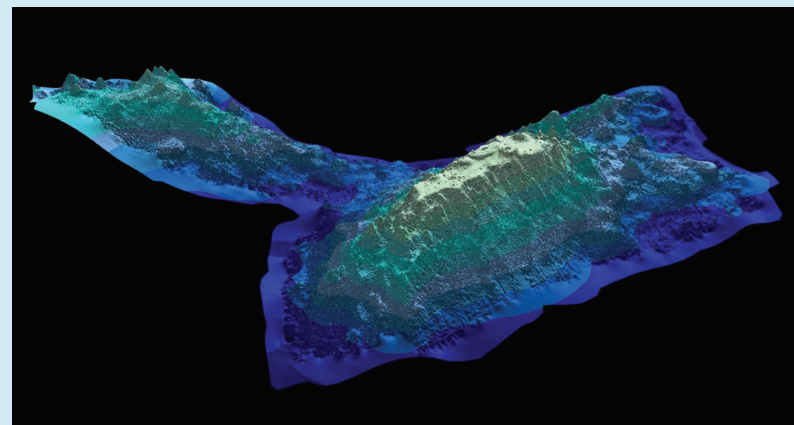


PHOTO: NOAA, CANADIAN HYDROGRAPHIC SERVICE & FISHERIES AND OCEANS CANADA



PHOTO: LYNN YAMANAKA- FISHERIES AND OCEANS CANADA

### data sources

- Baja California to the Bering Sea (B2B) study: Marine Conservation Biology Institute (MCBI) and the Commission for Environmental Cooperation Version 1.1 CD of physical, biological and social data relevant to conservation planning within the Baja California to Bering Sea ecoregion.
- Natural Resources Canada: Canadian National Geographical Names Registry.
- Seamounts Online: University of California.

### data resolution

- The B2B data is coded as to source of depth and coordinate information. Data coded as coming from ETOPO2 may be inaccurate by greater than 200 metre depth and 8 kilometres in latitude or longitude, while data emanating from GEBCO appear to be accurate to within 10 metre depth and 0.1 degree latitude or longitude (see metadata for more information).
- Accuracy/resolution of Seamounts Online data is unknown.

### date compiled

- B2B – 2005
- Seamounts Online – since 2001, downloaded by the BCMCA in 2009.

### reviewers

- Kim Conway, Natural Resources Canada
- Zach Ferdana, The Nature Conservancy

### reviewer comments

- None provided.

### caveats of use

- Recommended date of expiry for use of these data in a marine planning context: None provided.

### map, feature data and metadata access

- Visit [www.bcmca.ca/data](http://www.bcmca.ca/data) for more information.

### references

- Morgan, Lance, Sara Maxwell, Fan Tsao, Tara A.C. Wilkinson, and Peter Etnoyer. *Marine Priority Conservation Areas: Baja California to the Bering Sea*. Commission for Environmental Cooperation of North America and the Marine Conservation Biology Institute. Montreal, February 2005.
- Stocks, K. SeamountsOnline: an online information system for seamount biology. Version 2009-1. 2009. <http://seamounts.sdsc.edu>

**BCMCA Atlas**  
**Physical Representation**  
**Seamounts**

**Legend**

**Data Source**

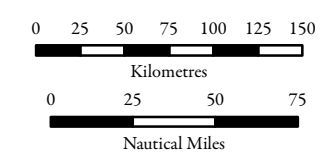
- Seamounts Online
- Baja California to the Bering Sea study (B2B)

**Data Sources:**  
 Commission for Environmental Cooperation and Marine Conservation Biology Institute  
 - Baja California to the Bering Sea study, Natural Resources Canada  
 - Canadian Geographical Names registry, University of California - Seamounts Online

**Base Data:**  
 ESRI Base Data, GeoBase, GeoBC, NOAA, Natural Resources Canada, USGS, Washington State Government

**Thematic Data:**  
 For more information on data sources and methods please refer to the facing page to this map

**Projection:** BC Albers NAD83



1:4,250,000 \*  
 \* Written scales are approximate and are based on a 11 x 17 inch paper size.

Prepared for:

**BC MARINE CONSERVATION ANALYSIS**

Map template by Caslys Consulting Ltd.  
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